| Index of Claims | Application No. |
|-----------------|-----------------|
|                 | 10/015,832      |
|                 | Examiner        |
|                 | Phillip Gambel  |

Applicant(s)

KALLED ET AL.

Art Unit

1644

| √ | Rejected | - | (Through numeral)<br>Cancelled |  | v | Non-Elected  | A | Appeal   |
|---|----------|---|--------------------------------|--|---|--------------|---|----------|
| = | Allowed  | · | Restricted                     |  | ı | Interference | 0 | Objected |

| Cla      | aim      | Date              |                |         |         |              | Γ         | Cla      | im   | Date         |                 |          |       |          |          |          | ]              | Cla      | aim            | Date     |               |               |   |          |          |          |                 |          |          |          |          |                 |          |           |
|----------|----------|-------------------|----------------|---------|---------|--------------|-----------|----------|--|--------------|-----------------|----------|-------|----------|----------|----------|----------------|----------|----------------|----------|---------------|---------------|---|----------|----------|----------|-----------------|----------|----------|----------|----------|-----------------|----------|-----------|
|          | T        | ~                 | 1              |         |         | Т            | Т         |          |  |              |                 | Г        |       |          |          |          |                |          | T              | T        | Т             |               | 1 |          |          |          | П               |          | ٦        | П        | T        | П               |          |           |
| ल        | Original | 3/8/02            | 1              |         |         | -            |           | ı        |  |              |                 |          | Final | Original |          |          | 1              |          |                |          |               |               |   | <u></u>  | Original |          |                 | 1        | - 1      |          |          | -               |          |           |
| Final    | ij       | 2                 | ·              |         |         | ١            |           |          |  |              |                 |          | i⊨    | rigi     |          |          | - 1            |          |                |          | İ             |               |   | Final    | ġ        |          | Ì               |          |          |          |          |                 |          |           |
| -        | Ō        | 3                 | 1              |         |         | 1            |           |          |  |              |                 |          | _     | 0        |          | - 1      |                |          |                |          |               |               |   | -        | 0        |          |                 |          |          |          |          | İ               |          |           |
| <u> </u> | 1        | +                 | ╁              | ╁       | ╁       |              | -+        | -        | $\neg$   | -            | $\dashv$        | -        |       | 51       | $\vdash$ | $\dashv$ | $\dashv$       | -        | $\dashv$       | -        | +             |               | ┨ |          | 101      |          |                 | $\dashv$ | $\dashv$ | ┪        | $\dashv$ | $\dashv$        | $\dashv$ | $\dashv$  |
|          | 2        | 7                 | ╁              | ╁       | ╁       | ┿            | +         | $\dashv$ | Н  | -            | $\dashv$        | ┝        |       | 52       | $\dashv$ | $\dashv$ | $\dashv$       | $\dashv$ | +              | $\dashv$ | ┿             | +-            | ┨ | -        | 102      | $\dashv$ | -               | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$        | -        | $\dashv$  |
|          |          | +                 | ╁              | +       | +       | +            | ┥         |          | -  |              | $\dashv$        | H        |       | 53       | $\dashv$ | $\dashv$ | $\dashv$       | -        | $\dashv$       | -        |               |               | 1 |          | 103      |          | $\dashv$        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$        | $\dashv$ | $\dashv$  |
| <u> </u> | 3        | H                 | <del> </del> — | ╀       |         |              | -         | $\dashv$ | -  | -            | 1               | -        |       |          | $\vdash$ | $\dashv$ | $\dashv$       |          | -+             | +        | +             | -             | - | -        |          |          |                 | $\dashv$ | $\dashv$ | ᅱ        | $\dashv$ | $\dashv$        | $\dashv$ | $\dashv$  |
| <u> </u> | 4        | H                 | <b>├</b>       | +-      | +       | +            | 4         | 4        | Н  |              |                 | -        |       | 54       | $\dashv$ | $\dashv$ | -              | -        | 4              | +        | +             |               | ł |          | 104      |          | -               | -        | $\dashv$ | -        | $\dashv$ | 4               | $\dashv$ | ႕         |
|          | 5        | Н                 | ↓_             | 4-      | $\perp$ | $\downarrow$ | $\dashv$  | _        |  |              |                 | -        |       | 55       | $\vdash$ | 4        | _              | $\dashv$ | 4              | _        | 4             |               |   | <u> </u> | 105      | -        | $\dashv$        | 4        | $\dashv$ | 4        | -        | 4               | $\dashv$ | 4         |
|          | 6        | 11                | ↓_             | 4_      | $\bot$  | 4            | 4         | _        |  |              |                 | F        |       | 56       | -        |          |                | $\dashv$ | 4              | -        | 4             |               |   |          | 106      |          |                 | _        | _        |          |          | 4               | -        | _         |
|          | 7        | Ц                 | <u> </u>       | ┸       | _       | 4            | _         |          |  |              |                 | Ļ        |       | 57       |          | _        | _              | 4        | 4              | _        | $\perp$       | _             |   |          | 107      | _        | $\dashv$        |          |          |          |          | _               | $\dashv$ | 4         |
|          | 8        | $\Box$            | <u> </u>       | ┸       | ┸       | 1            | 4         |          |  |              |                 | L        |       | 58       |          |          |                | _        | _              | _        | 4             |               | _ |          | 108      |          | $\Box$          | _        |          | _        |          | _               | _        | ᆜ         |
|          | 9        | L                 |                | 1_      | $\perp$ | ┙            | $\dashv$  | _        |  |              |                 | L        |       | 59       |          |          |                | _        | _              |          | _             |               |   |          | 109      |          |                 | $ \bot $ |          | _        | _        | $\dashv$        | _        | _         |
|          | 10       | Ш                 |                |         |         |              |           |          |  |              |                 |          |       | 60       |          |          |                |          |                |          | $\perp$       |               |   |          | 110      |          |                 |          |          |          |          |                 |          |           |
|          | 11       | П                 |                |         |         |              |           |          |  |              |                 |          |       | 61       |          |          |                |          |                |          | L             |               |   |          | 111      |          |                 |          |          |          |          |                 |          |           |
|          | 12       | П                 | Γ              |         | T       | T            |           |          |  |              |                 | Γ        |       | 62       | LT       | _7       |                |          | T              | _[       | $\prod$       |               |   |          | 112      | T        |                 | ]        |          | [        | [        |                 |          |           |
|          | 13       | П                 |                |         | $\top$  | 1            |           |          |  |              |                 | Γ        |       | 63       |          |          |                | 7        | $\Box$         | $\neg$   | T             | _             | 1 |          | 113      |          |                 |          |          |          |          |                 |          |           |
|          | 14       | $\Pi$             | Г              | T       | 1       | T            | T         |          | П  |              | $\neg$          | ٦        |       | 64       |          | $\neg$   |                | $\neg$   |                | 1        |               |               | 1 |          | 114      |          | $\Box$          |          |          |          |          |                 |          |           |
|          | 15       | $\dagger \dagger$ | 十              | 1       | 1       | $\top$       | 7         |          |  |              | $\Box$          | r        |       | 65       | П        | 一        |                | 寸        | 1              |          | 1             |               | 1 |          | 115      |          | $\Box$          |          |          |          |          |                 | $\neg$   | $\Box$    |
|          | 16       | $\dagger \dagger$ | 1              | 1       | $\top$  | $\top$       | $\dashv$  | $\neg$   | П  |              |                 | ı        |       | 66       | П        | 一        |                | 7        |                | 十        | 十             |               | 1 |          | 116      |          |                 |          | $\neg$   | $\neg$   | $\neg$   | 一               | $\neg$   | $\neg$    |
|          | 17       | 11                | $\dagger$      | t       | $\top$  | $^{\dagger}$ | $\dashv$  | -        |  |              | $\vdash$        | l        |       | 67       | H        |          | $\neg$         | +        | Ħ              | $\dashv$ | $\dashv$      |               | 1 |          | 117      |          | $\dashv$        | $\neg$   | $\neg$   | $\neg$   |          | _               | _        | $\dashv$  |
| $\vdash$ | 18       | #                 | t              | t       | +       | +            | 一         |          |  |              | $\vdash$        | l        |       | 68       | -        | -        | $\neg$         | $\dashv$ | 寸              | $\dashv$ | $\dashv$      | $\dashv$      | 1 | 1        | 118      |          | $\dashv$        |          |          |          |          |                 |          | 1         |
|          | 19       | ₩                 | +              | +       | +       | +            | -         | _        |  |              |                 | ŀ        |       | 69       | H        |          |                | _        | <del>-</del> † | -+       | +             | _             | 1 |          | 119      | -        | $\dashv$        | -        |          |          |          |                 | 1        | $\neg$    |
| <u> </u> | 20       | ₩                 | ╁╴             | +-      | +-      | +            | $\dashv$  |          | $\vdash$   |              | _               | <b>-</b> |       | 70       | H        | -1       | $\dashv$       | -        | +              | -+       | +             | -             | ┨ | -        | 120      |          |                 | $\dashv$ | $\dashv$ |          |          | $\dashv$        |          |           |
|          | 21       | ╢                 | ╁              | +       |         | +            | $\dashv$  | _        | $\vdash$   |              | $\dashv$        | -        |       | 71       | Н        | $\dashv$ | $\dashv$       | -        |                | -        | +             | +             | 1 | -        | 121      |          |                 | $\dashv$ | -        | $\dashv$ | -        | $\dashv$        | ┰        | ᅥ         |
|          | 22       | ╫                 | ┼              | ╁╴      | +       | +            | $\dashv$  |          | $\vdash$   | _            | $\dashv$        | -        |       | 72       | H        | $\dashv$ | $\dashv$       | -        | $\dashv$       | $\dashv$ | +             | +             | ┨ |          | 122      | $\dashv$ | -               | $\dashv$ | $\dashv$ | $\dashv$ |          | $\dashv$        |          | $\dashv$  |
| -        |          | 1                 | +              | +-      | 4-      | +            | $\dashv$  | _        | $\vdash$   |              | -               | F        |       |          | H        | -        |                |          |                | $\dashv$ | -             |               | ┨ |          | 123      |          | $\vdash$        | $\dashv$ | -        | $\dashv$ |          |                 |          | $\dashv$  |
| -        | 23       | ļ.                | ╀              | +       | 4       | +            |           |          | -  | _            | -               | ŀ        |       | 73       | $\vdash$ | -        | -              |          | -              |          | -             | +             | - | _        | 123      |          |                 |          |          | -        |          | $\dashv$        | $\dashv$ |           |
| <u> </u> | 24       | +                 | 1              | 1       |         | 4            | -1        |          | _  | _            |                 | F        |       | 74       |          | -        | -              | _        | -              | _        |               |               | 4 | <u> </u> | 124      |          |                 |          |          |          |          | -1              |          | $\dashv$  |
|          | 25       | <u> </u>          | ↓_             | 4       | 4_      | 4            | _         |          |  |              |                 | L        |       | 75       |          | _        |                | _        | _              | _        |               | _             | 4 | <u> </u> | 125      |          | $\vdash$        | _        |          |          |          | _               |          |           |
|          | 26       |                   | 1_             | $\perp$ |         | 4            | 4         |          |  | _            |                 | L        |       | 76       | Ш        |          |                | _        |                | _        | 4             |               |   | <u> </u> | 126      |          | $\perp$         | _        |          |          |          | $\Box$          | _        | 괵         |
|          | 27       | <u>L</u>          | <u> </u>       | $\perp$ |         | 1            | _         |          |  |              |                 | L        |       | 77       | Ш        |          |                |          |                | _        | _             |               |   |          | 127      |          |                 | _        |          |          |          |                 |          |           |
|          | 28       |                   | <u>L</u>       | $\perp$ |         | 1            | $\perp$   |          |  |              |                 | L        |       | 78       |          |          |                |          |                |          |               |               | ] |          | 128      |          |                 |          |          |          |          |                 |          |           |
|          | 29       | Г                 | T              | Т       |         |              |           |          |  |              |                 |          |       | 79       |          |          |                |          |                |          |               |               | ] |          | 129      |          |                 |          |          |          |          |                 |          |           |
|          | 30       |                   |                |         |         |              |           |          |  |              |                 | Γ        |       | 80       | -        |          |                |          |                |          | T             |               |   |          | 130      |          |                 |          |          |          |          |                 |          |           |
|          | 31       | T                 | Т              | Т       | Т       | T            | ヿ         |          |  |              |                 | Г        |       | 81       | П        |          |                | П        | $\neg$         |          | $\neg$        |               |   |          | 131      |          |                 |          |          |          |          |                 |          |           |
|          | 32       | T                 | T              | T       |         | 7            | 7         |          |  |              |                 |          |       | 82       |          |          |                |          |                | $\neg$   |               |               | 1 |          | 132      |          |                 |          |          |          |          |                 |          |           |
|          | 33       | T                 | 1              | +-      | 1       | 7            | $\dashv$  |          |  |              | $\Box$          | F        |       | 83       |          |          |                |          |                |          | 7             |               | 1 |          | 133      |          |                 |          |          |          |          |                 |          |           |
|          | 34       | †                 | $\top$         | T       | $\top$  | $\top$       | $\dashv$  |          |  | $\vdash$     | $\vdash$        | 1        |       | 84       | $\Box$   |          |                |          |                | 十        | 7             |               | 1 |          | 134      |          |                 |          |          |          |          |                 | $\neg$   |           |
|          | 35       | t                 | T              | t       | $\top$  | 7            | -†        | _        |  |              | $\vdash$        | ŀ        |       | 85       | $\Box$   | $\neg$   |                |          | 寸              | $\dashv$ | 十             |               | 1 |          | 135      |          |                 |          |          |          | П        | $\Box$          |          |           |
| <b> </b> | 36       | +                 | +              | +       | +       | +            | -+        |          | <del>                                     </del> | $\vdash$     | $\vdash$        | <u> </u> |       | 86       | $\vdash$ | $\dashv$ |                | $\dashv$ | $\dashv$       | $\dashv$ | $\dashv$      | +             | 1 |          | 136      |          | $\vdash$        | -        |          |          | $\vdash$ | -               |          |           |
| -        | 37       | +                 | +              | +       | +       | +            | -         | _        |  | <del> </del> | $\vdash$        | -        |       | 87       | $\vdash$ |          |                | -        |                | $\dashv$ | +             | +             | 1 | -        | 137      | $\vdash$ | $\vdash$        |          |          | H        | $\vdash$ | $\vdash$        |          |           |
|          | 38       | +-                | ╁╌             | ╁       | +-      | +            | -         | _        | <del> </del>                                     | <u> </u>     | $\vdash$        | <b>-</b> |       | 88       | $\vdash$ | -        | $\vdash$       | $\dashv$ | -              |          | -+            |               | 1 | -        | 138      | $\vdash$ |                 |          |          | $\vdash$ | $\vdash$ | $\vdash$        |          | -         |
| -        |          | +                 | +              | +       | +       | +            | -         | _        | -  | <u> </u>     | -               | -        |       | 89       | $\vdash$ | -        | -              | $\dashv$ |                | $\dashv$ | +             |               | ┨ |          | 139      | $\vdash$ | $\vdash$        |          | _        | $\vdash$ | $\vdash$ | $\vdash \dashv$ | -        | -         |
| -        | 39       | +-                | +              | +       | +       | +            | -         |          | H  | <u> </u>     | $\vdash \dashv$ | -        |       |          | $\vdash$ | $\dashv$ | $\vdash\dashv$ | $\dashv$ |                | -        | +             |               | 4 | -        |          |          | $\vdash$        |          |          |          | $\vdash$ | $\vdash$        | _        | $\dashv$  |
| <u></u>  | 40       | ╂                 | +-             | +       | +       | 4            | _         |          |  | <u> </u>     | Н               | -        |       | 90       |          | $\perp$  | _              | $\dashv$ | -              | -        | +             |               | 4 |          | 140      |          | $\vdash \vdash$ |          |          | $\vdash$ | Н        |                 | -        | $\dashv$  |
|          | 41       | 1                 | 4_             | $\perp$ | $\perp$ | 4            | _         |          |  | ļ            | Щ               |          |       | 91       | Ш        |          | Щ              |          | _              | $\dashv$ |               |               | 1 |          | 141      | _        | $\sqcup$        |          | ļ        | -        | Н        | -               | $\dashv$ | $\dashv$  |
| L        | 42       | 1                 | 1              | 1       | $\perp$ | 4            | _         |          | _  | <u>L</u>     | $\square$       |          |       | 92       |          |          |                | $\Box$   | _              | _        | 4             | _             | 1 |          | 142      | _        | $\sqcup$        |          |          | Ь.       | $\sqcup$ |                 | _        | $\sqcup$  |
|          | 43       | 1_                | $\perp$        | $\perp$ | ┸       | 4            |           |          |  | <u> </u>     | $\Box$          | 1        |       | 93       | Ш        |          |                |          |                | _        | $\rightarrow$ |               | 1 |          | 143      | L_       | Ш               |          |          | _        | Ш        | _               | _        | $\perp$   |
| L        | 44       | $\perp$           | $\perp$        | $\perp$ | $\perp$ | $\perp$      |           |          |  |              |                 | L        |       | 94       | $\sqcup$ |          |                |          | $_{\perp}$     | $\perp$  | $\perp$       |               | ] |          | 144      |          | Ш               |          |          |          | $\Box$   |                 |          |           |
|          | 45       |                   |                | Ĺ       |         | $\prod$      |           |          |  |              |                 | [        |       | 95       |          |          |                |          |                | $\Box$   |               |               |   | L_       | 145      |          |                 |          |          |          |          |                 |          |           |
|          | 46       | Γ                 | T              | Τ       |         | T            |           |          |  |              |                 | Γ        |       | 96       |          |          |                |          |                | T        | T             |               |   |          | 146      |          |                 |          |          |          |          |                 |          |           |
|          | 47       | Γ                 | Π              | Τ       | T       | Т            | $\exists$ |          |  |              |                 | ſ        |       | 97       | П        |          |                | T        | $\neg$         | T        | T             |               |   |          | 147      |          | LΤ              |          |          |          | oxdot    |                 |          |           |
|          | 48       | 1                 | T              | T       | $\top$  | 7            | 寸         |          | 1  |              |                 |          |       | 98       |          |          |                | $\Box$   |                |          | _             | $\neg$        | 1 |          | 148      |          |                 |          |          |          | П        |                 |          |           |
|          | 49       | $\top$            | $\top$         | †       | $\top$  | 7            | $\neg$    |          |  |              | П               | ľ        |       | 99       | П        |          | П              |          |                | $\neg$   | 1             | $\neg \vdash$ | 1 |          | 149      |          |                 |          |          |          | $\Box$   |                 |          | _         |
|          | 50       | T                 | +-             | +       | +       | $\forall$    | 寸         | _        | Т  | Т            | $\dashv$        | ŀ        |       | 100      | $\Box$   | $\Box$   | $\vdash$       | $\dashv$ | 一              | _        | +             | $\neg$        | 1 |          | 150      |          |                 |          |          |          |          |                 |          | $\exists$ |
|          |          |                   |                | -1-     | -1-     |              |           |          |  |              | نـــا           | Ĺ        |       |          |          |          |                |          |                |          |               |               | J |          |          |          |                 |          |          |          |          |                 |          |           |